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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,309	08/26/2003	Makoto Hidaka	241514US3	2602

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
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ALEXANDRIA, VA 22314

EXAMINER
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MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,309

Applicant(s)

HIDAKA ET AL.

Examiner

Thomas A. Morrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 10, 13, 14, 16-18, 21 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 9, 11, 12, 15, 19, 20, 22-25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1, 11, 22 and 24 are objected to because of the following informalities: (1) all occurrences of the recited "has a tendency to slip" in claims 1, 11, 22 and 24 should be -- slips --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 8-9, 11-12, 15, 19-20, 22-25 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding the independent claims 1, 4, 15, 24 and 25 and their dependent claims, the recited sequences of intervals and drive amounts of the control device/control means are confusing. This same problem occurs in claim 27. For example, it is unclear how the recited control device/control means can **first** calculate (determine) slip **based on information from the detection by the second detecting device**, and **then** set a second drive amount of a drive device/drive means during a second interval that **starts when the second detecting device detects the sheet**. In other words, it is unclear how the recited timing of the slip calculation (determination)

and the timing of the second interval can occur. Accordingly, further clarification of the control device/control means operation is needed for each of the independent claims.

***Response to Arguments***

3. Applicant's arguments filed 12/7/05 have been fully considered but they are not persuasive. Applicant first argues that the calculation of the second drive amount clearly occurs after determination of the first drive amount. Applicant also argues that such determination of the first drive amount and calculation of the second drive amount may both occur at the transition from the first interval to the second interval with some variation in view of design considerations and/or technical limitations, e.g., awaiting calculation of the first drive amount.

In response, it is noted that the language of the rejected claims does not recite that calculation of the second drive amount clearly occurs after determination of the first drive amount. Also, the rejected claims do not recite that the determination of the first drive amount and the calculation of the second drive amount may both occur at the transition from the first interval to the second interval. Rather, the language of the rejected claims is confusing, in that the first and second intervals appear to overlap in time (i.e., the first and second intervals both include a time when the second detecting device detects the sheet). As such, it is unclear how the second drive amount can start at the same time that the second detecting device detects the sheet. It appears that the detection by the second detecting device would be required prior to the start of the second drive amount. Accordingly, the recited timing limitations are unclear in the claims. To further emphasize how confusing the timing limitations are, it is noted that

claims 1, 11, 22, 24 and their dependent claims require that the control device **calculate the first drive amount** of the drive device during a first interval from when the first detecting device detects the sheet to when the second detecting device detects the sheet. On the other hand, such claims also appear to require **conditional calculation** of the first and second drive amounts by reciting, "wherein **when the control device determines that the sheet has a tendency to slip**, the control device calculates the first drive amount of the drive device, and sets the second drive amount of the drive device based on the calculated first drive amount" (emphasis added). It is unclear if the first and second drive amounts are always calculated by the control device or only calculated when the sheet is found to have a tendency to slip. Further clarification of the timing limitations in the claims is needed.

#### **Conclusion**

4. The fact that prior art has not been applied to the claims is not an indication that the claims are in condition for allowance, particularly in view of the rejection under 35 U.S.C. 112, second paragraph, outlined above.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
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